Juniperus monosperma Cinder Wooded Herbaceous Vegetation

MAP CLASS Oneseed Juniper Woodland

COMMON NAME One-seed Juniper Cinder Wooded Herbaceous Vegetation

PHYSIOGNOMIC CLASS Herbaceous Vegetation (V)

PHYSIOGNOMIC SUBCLASS Perennial graminoid vegetation (V.A)

PHYSIOGNOMIC GROUP Temperate or subpolar grassland with a sparse tree layer (V.A.6)

PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (V.A.6.N)

FORMATION Medium-tall temperate or subpolar grassland with a sparse needle-

leaved evergreen or mixed tree layer (V.A.6.N.f)

ALLIANCE Juniperus monosperma Wooded Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL Weak

USFS WETLAND SYSTEM Upland

RANGE

Wupatki National Monument

One-seed Juniper Cinder Wooded Herbaceous Vegetation is the most common association on the USDA-FS lands in the project environs. This association from our relevé data was found to predominates the southwestern section of the project boundary including Antelope Prairie and adjacent lands surrounding Hulls Wash and Ball Court Wash. Within Wupatki NM it was found adjacent to the USDA-FS lands in Antelope Prairie.

ENVIRONMENTAL DESCRIPTION

Wupatki National Monument

This association's elevation ranged from 5,364-5,758 ft (1,635-1,755 m) (average 5,512 ft/1,680 m). The slope was minimal to flat ranging from 0-5% (average 0.5%). The substrate always consisted of black cinder, with sporadic occurrence of basaltic boulders and sandstone. The cinder depth was site specific and varied depending on the geologic history of the site. Some sites had a thin layer of surface cinders and others had more than 2 m (7 ft) cinder depth.

MOST ABUNDANT SPECIES **Wupatki National Monument**

<u>Stratum</u> <u>Species</u>

Shrub Juniperus monosperma

ASSOCIATED SPECIES

Wupatki National Monument

Aristida purpurea var. longiseta, Bouteloua curtipendula, Bouteloua eriopoda, Bouteloua gracilis, Chaetopappa ericoides, Ericameria nauseosa, Gutierrezia sarothrae, Hesperostipa comata, Sporobolus airoides

VEGETATION DESCRIPTION

Wupatki National Monument

One-seed Juniper Cinder Wooded Herbaceous Vegetation total vegetation cover ranged from 7-48% absolute cover (average 22%) with 0-6% (average 0%) in the shrub layer and 1-27% (average 9%) in the herbaceous layer. Although the association is considered to be herbaceous, relevés were measured with low herbaceous cover. Varying depth of cinder caused broad scale patchiness of the grass species. The total species diversity ranged from 3-12 species (average 6) within the 27 relevés sampled.

The shrub layer is dominated by *Juniperus monosperma* with absolute cover ranging from 3-35% (average 13%). *Bouteloua eriopoda* and *Pleuraphis jamesii* occur frequently in the herbaceous layer; however, they do not need to be present. *Bouteloua eriopoda* ranged from 0-17% absolute cover (average 8%) and *Pleuraphis jamesii* ranged from 0-19% absolute cover (average 5%).

CONSERVATION RANK G?

USGS-NPS Vegetation Mapping Program Wupatki National Monument

DATABASE CODE CEGL005807

MAP CLASSES

The association One-seed Juniper Cinder Wooded Herbaceous Vegetation is represented by map class Oneseed Juniper Woodland (map code 27).

The total area mapped of this association within Wupatki NM is 4,240 ac (1,716 ha) within 290 polygons and the total area in the park environs is 18,666 ac (7,554 ha) within 266 polygons.

COMMENTS

Wupatki National Monument

These data are still under review with NatureServe to determine the range of variability in the percent cover of the understory community to still be maintained within the herbaceous alliance.